Table 2.2a Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2004
Million Short Tons

Rank	State	Underground			Surface			Total			Percent of Total		
(by demonstrated reserve base)	d	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	W	35,922	70,958	w	39,067	48,322	1,140	74,989	119,280	6.3%	28.1%	24.1%
2	Illinois	760	27,944	87,972	36	10,075	16,557	796	38,019	104,529	4.4%	14.2%	21.1%
3	Wyoming	w	22,950	42,501	w	18,853	21,824	7,053	41,804	64,325	38.9%	15.6%	13.0%
4	West Virginia	1,136	15,673	29,366	382	2,431	3,854	1,518	18,104	33,220	8.4%	6.8%	6.7%
5	Kentucky	948	7,488	17,202	181	7,516	13,023	1,129	15,004	30,225	6.2%	5.6%	6.1%
	Eastern Kentucky	669	716	1,282	154	5,244	9,389	823	5,960	10,671	4.5%	2.2%	2.2%
	Western Kentucky	279	6,772	15,920	26	2,273	3,634	306	9,044	19,554	1.7%	3.4%	4.0%
6	Pennsylvania	521	10,768	23,330	93	1,055	4,267	614	11,822	27,597	3.4%	4.4%	5.6%
7	Ohio	199	7,733	17,577	119	3,774	5,765	318	11,507	23,342	1.8%	4.3%	4.7%
8	Colorado	362	6,050	11,529	53	3,748	4,764	415	9,798	16,293	2.3%	3.7%	3.3%
9	Texas				546	9,578	12,442	546	9,578	12,442	3.0%	3.6%	2.5%
10	New Mexico	w	2,848	6,171	w	4,086	6,001	1,304	6,934	12,172	7.2%	2.6%	2.5%
11	Indiana	256	3,630	8,764	142	451	771	398	4,080	9,534	2.2%	1.5%	1.9%
12	North Dakota				1,191	6,935	9,090	1,191	6,935	9,090	6.6%	2.6%	1.8%
13	Alaska		2,745	5,423	W	545	689	W	3,291	6,112		1.2%	1.2%
14	Missouri		689	1,479	w	3,158	4,511	w	3,847	5,990		1.4%	1.2%
15	Utah	317	2,538	5,177		212	268	317	2,750	5,445	1.7%	1.0%	1.1%
16	Alabama	308	521	1,034	33	2,285	3,208	341	2,806	4,242	1.9%	1.0%	0.9%
17	Iowa		807	1,732		320	457		1,127	2,189		0.4%	0.4%
18	Virginia	200	653	1,163	50	369	576	250	1,022	1,740	1.4%	0.4%	0.4%
19	Oklahoma	w	574	1,232	w	227	325	17	801	1,557	0.1%	0.3%	0.3%
20	Washington		674	1,332	w	7	8	w	681	1,341		0.3%	0.3%
21	Kansas				w	681	973	w	681	973		0.3%	0.2%
22	Tennessee	7	281	513	19	180	266	26	462	779	0.1%	0.2%	0.2%
23	Maryland	w	320	584	w	46	67	17	366	652	0.1%	0.1%	0.1%
24	Louisiana				w	316	427	w	316	427		0.1%	0.1%
25	Arkansas		127	272		101	144		228	417		0.1%	0.1%
26	South Dakota					277	366		277	366		0.1%	0.1%
27	Michigan		55	123		3	5		59	128		0.0%	0.0%
28	Oregon		7	15		2	3		9	17		0.0%	0.0%
29	North Carolina		5	11	-				5	11		0.0%	0.0%
30	Arizona				w	5	7	w	5	7		0.0%	0.0%
31	Idaho		2	4					2	4		0.0%	0.0%
31	Georgia		1	2		1	2		2	4		0.0%	0.0%
33	Mississippi				w	-		w			-		
	Appalachian Total	w	36,671	74,862	w	15,385	27,394	w	52,056	102,258		19.5%	20.7%
	Interior Total	w	40,598	117,494	w	27,183	40,246	w	67,780	157,740		25.4%	31.9%
	Western Total	w	73,736	143,110	w	73,737	91,342	w	147,475	234,452		55.2%	47.4%
	Fact of the Missi Pi		75.074	107 (45		20 107	48,361		102.260	227.005		38.6%	47.7%
	East of the Mississippi River	W	75,074	187,645	w	28,186		w	103,260	236,007			
	West of the Mississippi River	W	75,931	147,821	w	88,118	110,621	w	164,051	258,443		61.4%	52.3%
	U.S. Total	5,339	151,007	335,468	12,783	116,305	158,982	18,122	267,312	494,450			

w = Withheld to avoid disclosure of individual company data

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable a the time of determinations.

Table 2.2b Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2003
Million Short Tons

Rank	State	Underground		Surface			Total			Percent of Total			
(by demonstrated reserve base)		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana	w	35,923	70,958	w	39,107	48,372	1,197	75,030	119,330	6.7%	28.0%	24.1%
2	Illinois	873	27,961	88,025	40	10,079	16,563	913	38,040	104,589	5.1%	14.2%	21.1%
3	Wyoming		22,950	42,501	6,707	19,282	22,320	6,707	42,232	64,821	37.4%	15.7%	13.1%
4	West Virginia	1,153	15,770	29,548	343	2,476	3,925	1,497	18,246	33,473	8.3%	6.8%	6.7%
5	Kentucky	796	7,563	17,346	198	7,546	13,076	994	15,109	30,422	5.5%	5.6%	6.1%
	Eastern Kentucky	468	775	1,387	171	5,270	9,437	639	6,045	10,824	3.6%	2.3%	2.2%
	Western Kentucky	328	6,788	15,959	27	2,276	3,639	355	9,064	19,597	2.0%	3.4%	4.0%
6	Pennsylvania	439	10,825	23,437	97	1,065	4,283	536	11,889	27,719	3.0%	4.4%	5.6%
7	Ohio	202	7,746	17,606	134	3,781	5,777	336	11,527	23,382	1.9%	4.3%	4.7%
8	Colorado	360	6,087	11,599	67	3,750	4,766	427	9,837	16,365	2.4%	3.7%	3.3%
9	Texas				623	9,622	12,500	623	9,622	12,500	3.5%	3.6%	2.5%
10	New Mexico	w	2,855	6,187	w	4,103	6,025	1,351	6,958	12,212	7.5%	2.6%	2.5%
11	Indiana	262	3,638	8,784	170	469	802	432	4,107	9,586	2.4%	1.5%	1.9%
12	North Dakota				1,211	6,963	9,128	1,211	6,963	9,128	6.7%	2.6%	1.8%
13	Alaska		2,745	5,423	W	547	691	w	3,292	6,114		1.2%	1.2%
14	Missouri		689	1,479	w	3,158	4,512	w	3,848	5,991		1.4%	1.2%
15	Utah	W	2,559	5,221	W	212	268	331	2,771	5,488	1.8%	1.0%	1.1%
16	Alabama	283	537	1,066	25	2,290	3,215	308	2,828	4,282	1.7%	1.1%	0.9%
17	Iowa		807	1,732		320	457		11,027	2,189		4.1%	0.4%
18	Virginia	192	676	1,204	34	378	590	226	1,054	1,794	1.3%	0.4%	0.4%
19	Oklahoma	W	574	1,233	W	229	327	17	803	1,559	0.1%	0.3%	0.3%
20	Washington		674	1,332	w	12	16	w	687	1,348		0.3%	0.3%
21	Kansas					681	973		681	973		0.3%	0.2%
22	Tennessee	4	282	515	18	182	269	22	464	783	0.1%	0.2%	0.2%
23	Maryland	W	324	591	W	47	70	61	371	661	0.3%	0.1%	0.1%
24	Louisiana				w	320	431	w	320	431		0.1%	0.1%
25	Arkansas		127	272	-	101	144		228	417		0.1%	0.1%
26	South Dakota					277	366		277	366		0.1%	0.1%
27	Michigan		55	123		3	5		59	128		0.0%	0.0%
28	Arizona				w	18	23	W	18	23		0.0%	0.0%
29	North Carolina		5	11	-				5	11	-	0.0%	0.0%
30	Idaho		2	4	-				2	4		0.0%	0.0%
30	Georgia		1	2		1	2		2	4		0.0%	0.0%
32	Mississippi				W			W			-		
	A 1		26.041	7E 3/F		15 400	25 570		E2 421	102.022		10.50/	20.70/
	Appalachian Total Interior Total	w	36,941 40,639	75,367 117,607	w	15,490 27,258	27,568 40,353	W	52,431 77,799	102,933 157,960		19.5% 29.0%	20.7% 31.8%
	Western Total	W	73,795	143,225	w w	74,271	91,975	w w	148,067	235,199		55.2%	31.8% 47.4%
	Western Total	W	13,193	143,425	W	74,471	91,9/5	W	148,007	235,199		33.4%	47.4%
	East of the Mississippi River	w	75,383	188,258		28,317	48,577	w	103,701	236,834		38.6%	47.7%
	West of the Mississippi River	w	75,383	188,258	w w	28,317 88,702	111,319	w	174,596	259,259		65.1%	52.3%
	west of the Mississippi River	W	15,992	147,941	W	88,702	111,319	W	1/4,590	259,259		05.1%	54.3%
	U.S. Total	5,225	151,376	336,199	12,730	117,019	159,893	17,955	268,396	496,092			

w = Withheld to avoid disclosure of individual company data

Note:

Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable a the time of determinations.

Table 2.2c Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2002

Million Short Tons

Rank	State	Underground			Surface			Total			Percent of Total		
(by demonstrated reserve base)		Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana		35,923	70,958	1,115	39,145	48,418	1,115	75,067	119,377	6.1%	27.9%	24.0%
2	Illinois	873	27,978	88,077	27	10,083	16,570	900	38,061	104,648	4.9%	14.1%	21.0%
3	Wyoming		22,950	42,501	6,673	19,688	22,790	6,673	42,638	65,291	36.6%	15.8%	13.1%
4	West Virginia	1,074	15,863	29,722	359	2,518	3,991	1,433	18,381	33,713	7.9%	6.8%	6.8%
5	Kentucky	812	7,636	17,484	198	7,577	13,130	1,010	15,213	30,614	5.5%	5.6%	6.2%
	Eastern Kentucky	535	833	1,491	168	5,298	9,486	703	6,131	10,977	3.9%	2.3%	2.2%
	Western Kentucky	277	6,803	15,993	30	2,279	3,644	307	9,082	19,637	1.7%	3.4%	3.9%
6	Pennsylvania	468	10,880	23,541	108	1,074	4,297	576	11,954	27,838	3.2%	4.4%	5.6%
7	Ohio	214	7,757	17,631	141	3,789	5,788	356	11,546	23,419	2.0%	4.3%	4.7%
8	Colorado	429	6,120	11,661	199	3,752	4,769	629	9,872	16,430	3.5%	3.7%	3.3%
9	Texas				673	9,668	12,559	673	9,668	12,559	3.7%	3.6%	2.5%
10	New Mexico	w	2,860	6,199	w	4,121	6,051	1,385	6,981	12,249	7.6%	2.6%	2.5%
11	Indiana	223	3,645	8,801	158	488	835	381	4,134	9,637	2.1%	1.5%	1.9%
12	North Dakota				1,211	6,993	9,166	1,211	6,993	9,166	6.6%	2.6%	1.8%
13	Alaska		2,745	5,423	w	548	692	W	3,293	6,115		1.2%	1.2%
14	Missouri		689	1,479	W	3,159	4,512	w	3,848	5,991		1.4%	1.2%
15	Utah	W	2,582	5,267	w	212	268	356	2,794	5,534	2.0%	1.0%	1.1%
16	Alabama	344	553	1,097	21	2,295	3,221	366	2,848	4,318	2.0%	1.1%	0.9%
17	Iowa		807	1,732		320	457		1,127	2,189		0.4%	0.4%
18	Virginia	220	700	1,247	41	386	603	261	1,086	1,850	1.4%	0.4%	0.4%
19	Oklahoma	W	575	1,233	w	230	328	18	804	1,562	0.1%	0.3%	0.3%
20	Washington		674	1,332	w	18	23	w	693	1,356		0.3%	0.3%
21	Kansas				w	681	973	w	681	973		0.3%	0.2%
22	Tennessee	5	283	516	10	184	271	16	467	787	0.1%	0.2%	0.2%
23	Maryland	W	327	597	w	49	72	65	376	669	0.4%	0.1%	0.1%
24	Louisiana				w	323	437	w	323	437		0.1%	0.1%
25	Arkansas		127	272	W	101	144	w	228	417		0.1%	0.1%
26	South Dakota					277	366		277	366		0.1%	0.1%
27	Michigan		55	123		3	5		59	128		0.0%	0.0%
28	Arizona				W	30	38	w	30	38		0.0%	0.0%
29	Oregon		7	15		2	3		9	17		0.0%	0.0%
30	North Carolina		5	11					5	11		0.0%	0.0%
31	Idaho		2	4					2	4		0.0%	0.0%
31	Georgia		1	2		1	2		2	4		0.0%	0.0%
	Appalachian Total	w	37,202	75,855	w	15,594	27,731	w	52,796	103,586		19.6%	20.8%
	Interior Total	w	40,679	117,710	w	27,335	40,464	w	68,015	158,178		25.2%	31.8%
	Western Total	w	73,863	143,360	w	74,786	92,584	w	148,649	235,943		55.2%	47.4%
	TOTAL TOTAL	W	13,003	143,300	W	74,700	74,004	W	170,047	433,743	-	JJ,4 /0	47.470
	East of the Mississippi River	w	75,683	188,849	w	28,447	48,785	w	104,132	237,636		38.6%	47.7%
	West of the Mississippi River	w	76,061	148,076	w	89,268	111,994	w	165,328	260,071		61.4%	52.3%
	MC m 4 l	E 224	151 511	227.050	44.005	11==10	4.40 =00	40.045	200 155	40# #00			
	U.S. Total	5,231	151,744	336,928	12,985	117,713	160,780	18,216	269,457	497,708			

w = Withheld to avoid disclosure of individual company data

Note: Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations.

Table 2.2d Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves and Demonstrated Reserve Base by State and Mining Method, 2001
Million Short Tons

Rank	State	Underground		Surface			Total			Percent of Total			
(by demonstrated reserve base)	1	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
1	Montana		35,923	70,958	1,155	39,182	48,465	1,155	75,105	119,423	6.5%	27.8%	23.9%
2	Illinois	787	27,995	88,131	32	10,088	16,578	819	38,083	104,710	4.6%	14.1%	21.0%
3	Wyoming		22,950	42,501	6,100	20,091	23,257	6,100	43,041	65,758	34.3%	15.9%	13.2%
4	West Virginia	1,158	15,956	29,898	343	2,567	4,069	1,502	18,523	33,966	8.4%	6.8%	6.8%
5	Kentucky	812	7,715	17,635	275	7,611	13,191	1,087	15,326	30,826	6.1%	5.7%	6.2%
	Eastern Kentucky	582 229	896	1,604	246 29	5,328	9,539	829	6,224 9,103	11,143	4.7%	2.3%	2.2% 3.9%
6	Western Kentucky	456	6,819 10,940	16,031 23,652	101	2,284 1,084	3,651 4,312	258 558	12,024	19,682 27,965	1.4% 3.1%	3.4% 4.4%	5.6%
7	Pennsylvania Ohio	242	7,767	17,653	208	3,797	5,801	450	11,564	23,454	2.5%	4.4%	4.7%
8	Colorado	353	6,151	11,721	209	3,754	4,771	562	9,905	16,493	3.2%	3.7%	3.3%
9	Texas			11,721	724	9,711	12,616	724	9,711	12,616	4.1%	3.6%	2.5%
10	New Mexico	w	2,862	6,202	w	4,144	6,085	1,404	7,006	12,287	7.9%	2.6%	2.5%
11	Indiana	235	3,652	8,817	162	509	870	397	4,161	9,687	2.2%	1.5%	1.9%
12	North Dakota			·	1,151	7,022	9,205	1,151	7,022	9,205	6.5%	2.6%	1.8%
13	Alaska		2,745	5,423	w	549	694	w	3,294	6,117		1.2%	1.2%
14	Missouri		689	1,479	w	3,159	4,512	w	3,848	5,992		1.4%	1.2%
15	Utah	364	2,607	5,317		212	268	364	2,819	5,585	2.0%	1.0%	1.1%
16	Alabama	327	568	1,127	24	2,298	3,226	352	2,866	4,353	2.0%	1.1%	0.9%
17	Iowa		807	1,732	-	320	457		1,127	2,189		0.4%	0.4%
18	Virginia	206	723	1,288	34	394	615	240	1,117	1,902	1.3%	0.4%	0.4%
19	Oklahoma	w	575	1,234	w	231	329	19	806	1,564	0.1%	0.3%	0.3%
20	Washington		674	1,332	w	24	31	w	698	1,363		0.3%	0.3%
21	Kansas				w	681	973	w	681	973	-	0.3%	0.2%
22	Tennessee	10	284	518	14	186	274	24	470	792	0.1%	0.2%	0.2%
23	Maryland	W	331	604	W	50	74	72	381	678	0.4%	0.1%	0.1%
24	Louisiana			272	W	327	441	w	327	441		0.1%	0.1%
25 26	Arkansas South Dakota		127	272	-	101 277	144 366		228 277	417 366		0.1%	0.1%
27	Michigan Michigan		55	123		3	500		58	128	 	0.1% 0.0%	0.1% 0.0%
28	Arizona		51	102	w		3	w	51	102		0.0%	0.0%
29	Oregon		7	15	w 	2	3	W	9	18		0.0%	0.0%
30	North Carolina		5	11	_				5	11		0.0%	0.0%
31	Idaho		2	4	_				2	4		0.0%	0.0%
31	Georgia		1	2		1	2		2	4		0.0%	0.0%
	g		_			_	_		_				
	Appalachian Total	w	37,472	76,359	w	15,706	27,914	w	53,178	104,272		19.7%	20.9%
	Interior Total	w	40,719	117,819	w	27,414	40,576	w	68,133	158,399		25.2%	31.7%
	Western Total	w	73,972	143,575	w	75,257	93,145	w	149,229	236,721		55.2%	47.4%
	East of the Mississippi River	W	75,992	189,459	w	28,588	49,017	W	104,580	238,476		38.7%	47.8%
	West of the Mississippi River	W	76,170	148,292	w	89,787	112,617	w	165,957	260,913		61.3%	52.2%
	U.S. Total	5,172	152,162	337,751	12,629	118,375	161,634	17,801	270,537	499,389			

w = Withheld to avoid disclosure of individual company data

Source. Eliquinum Courteport 200

Note:

Recoverable coal reserves at producing mines represent the quantity of coal that can be removed from existing coal reserves at reporting mines. Estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable a the time of determinations.